### **Maryland Trawl Gear Characterization**

Prepared by the Atlantic States Marine Fisheries Commission

#### 1.1 TRAWLS

### 1.1.1.1 Gear Description

Bottom otter trawls and occasional use of beam trawls make up the Maryland trawl fishery. For a general description of trawls and more information on how sea turtles may be affected by trawls see the gear appendix.

### 1.1.2 Beam Trawls

### 1.1.2.1 Gear Description

For a general description and diagram of a beam trawl see the gear appendix.

### 1.1.2.2 Effort

Beam trawls are only occasionally used in or outside the Maryland waters of the Atlantic Ocean (Casey 1999). Commercial trawling is prohibited in the Chesapeake Bay and within Maryland waters up to one mile from the coast. However, trawling is allowed in state waters beyond one mile (COMAR 08.02.05.03 D).

### 1.1.2.3 Sea Turtle Bycatch

There are no state-run observer programs in the beam trawl fishery and no other bycatch reports were available.

### 1.1.2.4 Laws and Regulations

Commercial trawling is prohibited in the Chesapeake Bay and within Maryland waters up to one mile from the coast. However, trawling is allowed in state waters beyond one mile (COMAR 08.02.05.03 D).

### 1.1.3 Otter Trawls

#### 1.1.3.1.1 Gear Description

The Maryland otter trawl fishery consists only of bottom otter trawls. For a general description of otter trawls see the gear appendix.

#### 1.1.3.2 Bottom Otter Trawls

### 1.1.3.2.1 Gear Description

For a general description and diagram of bottom otter trawls see the gear appendix. Depending on the targeted species, trawls have minimum mesh sizes ranging from 3-3/8 inches (nine centimeters) square or 3-3/4 inches (ten centimeters) diamond to six inches (15 centimeters) square or 5.5 inches (14 centimeters) diamond (COMAR08.02.05).

### 1.1.3.2.2 Targeted Species

In 2001, the landings were 34% horseshoe crab, 14% Atlantic croaker, 14% summer flounder, 8% skates, 7% weakfish, and 7% striped bass (ACCSP 2004).

#### 1.1.3.2.3 Number of Licensed and Active Fishermen

There were 17 active otter trawl fishermen in 2003, and 23 active fishermen in 2004 (MDNR 2005). For a description of licenses and the number of licenses issued, see Appendix 3.

#### 1.1.3.2.4 Effort

Commercial trawling is prohibited in the Chesapeake Bay and within Maryland waters up to one mile from the coast. However, trawling is allowed in state waters beyond one mile (COMAR 08.02.05.03 D). Though bottom otter trawls are not permitted in the Chesapeake Bay, fisheries personnel use this gear extensively in state waters to carry out resource assessment of both finfish and blue crabs (Casey 1999). Information on the depth fished, the time of day fished, and the amount of gear fished is not known. In 2002, the highest landings and effort were in July and August (Figure 1, Table 4-1) (MDNR 2004c).

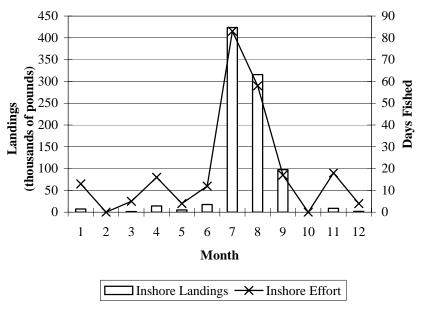


Figure 1. Landings and effort by otter trawl in 2002 by month.

### 1.1.3.2.5 Status of the Fishery

Between 1998 and 2002, the highest landings by bottom otter trawl were in 2002 with 893,976 pounds (406 metric tons). The highest effort was in 1999 with 244 days fished, but effort was similar in 1998 and 2002 (Figure 2, Table 4-2).

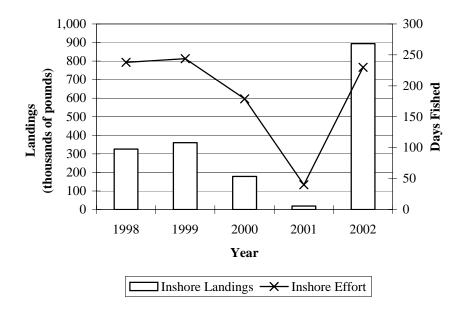


Figure 2. Landings and effort by otter trawl from 1998 to 2002.

### 1.1.3.2.6 Sea Turtle Bycatch

There are no state-run observer programs for the bottom otter trawl fishery, and no other bycatch reports were available.

### 1.1.3.2.7 Laws and Regulations

Depending on the targeted species, trawls have minimum mesh sizes ranging from 3-3/8 inches (nine centimeters) square or 3-3/4 inches (ten centimeters) diamond to six inches (15 centimeters) square or 5.5 inches (14 centimeters) diamond (COMAR08.02.05). Commercial trawling is prohibited in the Chesapeake Bay and within Maryland waters up to one mile from the coast. However, trawling is allowed in state waters beyond one mile (COMAR 08.02.05.03 D).

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## Applicable Appendices:

### APPENDIX 3. COMMERCIAL FISHERIES LICENSING

The MDNR issues a variety of commercial license types depending on the type and number of gear that will be used. One of the most commonly issued licenses is a tidal fish license. The TFL is a consolidated license for harvesting finfish and shellfish, including blue crabs with trotlines and up to 300 crab pots. A TFL authorizes a licensee to guide fishing parties; catch fish for commercial purposes; and buy, sell, process, transport, export, or otherwise deal in fish that were caught in Maryland. A TFL allows a licensee to engage in each activity indicated on the license and for catching crabs, to utilize the number of crewmembers indicated on the license. The license year for every TFL is 12 months from September 1 through August 31 of the following year and a licensee and crewmembers may engage only in those activities for which the annual fees for that license year have been paid. The MDNR cannot issue more than one authorization to a person to engage in each activity specified in the license during a license year (Kimmel 2003).

Table 3-1. Commercial fisheries license types and number of licenses issued from 1998 to 2002

Commercial License Category		1999	2000	2001	2002	2003	2004*
Unlimited Tidal Fish	1,837	2,017	1,988	1,992	2,001	2,000	1,995
Finfish Harvester	355	326	311	306	298	293	276
Clam Harvester	62	33	26	18	16	15	16
Oyster Dredge Boat	3	3	2	3	2	2	2
Oyster Harvester	896	834	823	808	791	767	721
Conch, Turtles, and Lobster Harvester	19	12	12	12	14	11	12
Limited Crab Catcher	4,659	4,271	4,082	3,992	3,924	3,855	3,785
Crab Harvester (up to 300 pots)	242	261	246	244	245	242	241
Crab Harvester (up to 600 pots)	232	234	234	232	233	231	226
Crab Harvester (up to 900 pots)	416	419	411	411	412	410	410
Finfish (Hook and Line)	343	330	321	306	293	287	276
Fishing Guide Resident	550	519	495	484	468	459	458
Fishing Guide Non-resident	62	56	56	52	53	53	55
Master Guide	16	19	15	15	18	18	18

<sup>\*</sup>Data from 2004 is preliminary and not certified as complete.

# **APPENDIX 4. DATA TABLES**

Table 4-1. Landings and effort by otter trawl in 2002 by month.

Month	<b>Inshore Landings (Pounds)</b>	Inshore Effort (Days Fished)
1	7,495	13
2	0	0
3	1,523	5
4	14,416	16
5	5,223	4
6	17,708	12
7	423,494	83
8	315,517	58
9	97,771	17
10	0	0
11	8,921	18
12	1,909	4

Table 4-2. Landings and effort by otter trawl from 1998 to 2002.

Year	<b>Inshore Landings (Pounds)</b>	<b>Inshore Effort (Days Fished)</b>			
1998	325,722	238			
1999	360,449	244			
2000	178,220	179			
2001	18,537	40			
2002	893,976	230			